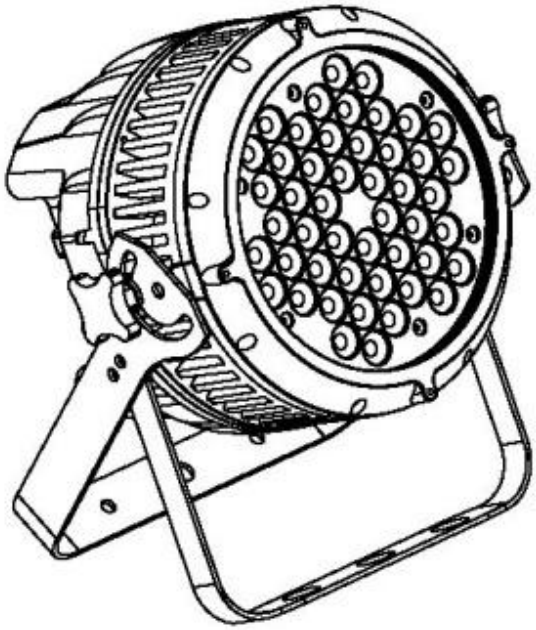
Ilumipod 48 IP Optic RGBW

USER MANUAL



ILUMINARC™
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TABLE OF CONTENTS

1. BEFORE YOU BEGIN

What is included

- 1 x Ilumipod 48 IP Optic RGBW
- 1 x Power cable with plug
- 1 x IP66 power extension cable
- 1 x IP66 signal extension cable
- 1 x DMX input cable adapter
- 1 x DMX output cable adapter
- 1 x Warranty Card
- 1 x User Manual

Unpacking Instructions

Immediately upon receiving a fixture, carefully unpack the carton, check the contents to ensure that all parts are present, and have been received in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

AC Power

This fixture has an auto-switching power supply that can accommodate a wide range of input voltages. The only thing necessary to do before powering on the unit is to make sure the line voltage you are applying is within the range of accepted voltages. This fixture will accommodate between 100V and 240V AC 50/60 Hz. All fixtures must be powered directly off a switched circuit and cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch.

Safety Instructions

Please read these instructions carefully, which includes important information about the installation, usage and maintenance of this product.

- Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.
- Always make sure that you are connecting to the proper voltage, and that the line voltage you are connecting to is not higher than that stated on the decal or rear panel of the fixture.
- Always disconnect from power source before servicing or replacing fuse and be sure to replace with same fuse type.
- Secure fixture to fastening device using a safety chain.
- Maximum ambient temperature (Ta) is 104°F (40°C). Do not operate fixture at temperatures higher than this.
- In the event of a serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.
- Never connect the device to a dimmer pack.
- Make sure the power cord is never crimped or damaged.
- Never disconnect the power cord by pulling or tugging on the cord.
- Avoid direct eye exposure to the light source while it is on.
- Do not daisy chain power to more than **7** units @ 120V and **15** units @ 230V.

Caution! ***There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact ILIMINARC™ at: (954) 923-3680.***

Caution! ***After prolonged periods of operation, the fixture chassis may reach high temperatures. Use caution when handling this fixture.***

Note! ***Please refer to local code and regulation for proper installation of this fixture.***

2. INTRODUCTION

Features

- 3, 4, 5, 6, or 11-channel DMX-512 LED wash light (with ID addressing)
- Operating modes
  - 3-channel: RGB control
  - 3-channel: HSV control (hue, saturation and value)
  - 4-channel: RGBW control
  - 4-channel: RGB, dimmer
  - 5-channel: RGBW, dimmer
  - 6-channel: RGBW, dimmer, strobe
  - 11-channel: RGBW, ID, dimmer, strobe, macro, auto, auto speed, custom, dimmer speed
- RGBW color mixing with or without DMX controller
- Color temperature presets (3,200K - 10,000K)
- Built-in automated programs via DMX
- Recall custom programs via DMX

Additional Features

- High-power, 2W – 3W (750mA – 1000mA) LEDs
- Ingress Protection: IP66
- Adjustable barn doors to direct output (includes gel frame)
- LED display with lock-out feature
- Power and Data extension cables (3.3 FT., 1 M)

DMX Channel Summary

The Ilumipod 48 IP Optic RGBW has a total of 7 DMX channel configurations, referred to as “Personalities” in this manual and in the fixture onboard control board. The 7 personalities are [STAG, Arc.1, Ar1.D, Arc.2, Ar2.d, Ar2.s, and HSV]. Each of the different personalities can be accessed from the control panel. Please see section on “Control Panel Functions” on a description on how to accomplish this.

[STAG]	CHANNEL	DESCRIPTION
	1	Dimmer
	2	Red (step time when cus.01~10 in ch.8 is activated)
	3	Green(fade time when cus.01~10 in ch.8 is activated)
	4	Blue
	5	White
	6	Color Macro / White Balance / Hyper Color
	7	Strobe
	8	Auto & Custom Programs
	9	Auto Speed Adjustment
	10	Dimmer Speed
	11	ID Address Selection

[ARC.1]	CHANNEL	DESCRIPTION
	1	Red
	2	Green
	3	Blue

[AR1.D]	CHANNEL	DESCRIPTION
	1	Dimmer
	2	Red
	3	Green
	4	Blue

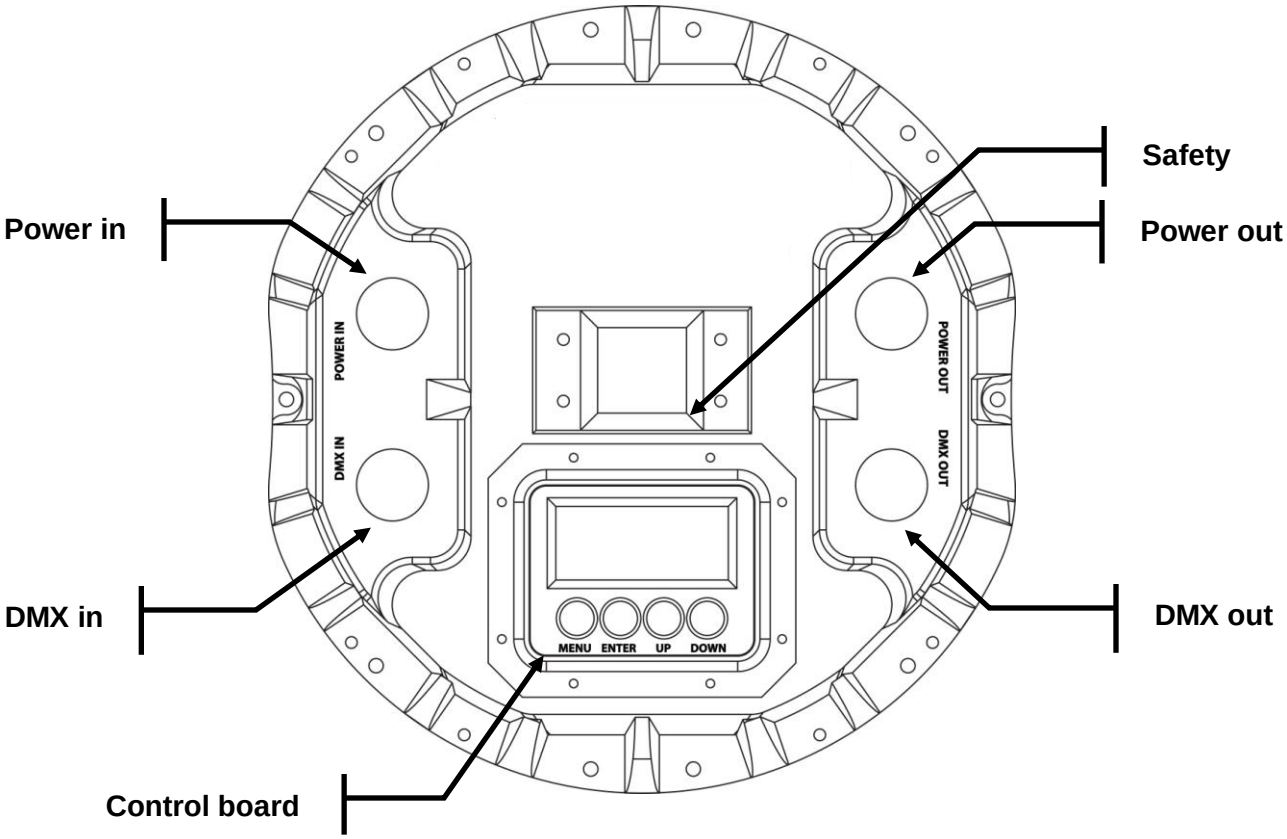
[ARC.2]	CHANNEL	DESCRIPTION
	1	Red
	2	Green
	3	Blue
	4	White

[AR2.D]	CHANNEL	DESCRIPTION
	1	Dimmer
	2	Red
	3	Green
	4	Blue
	5	White

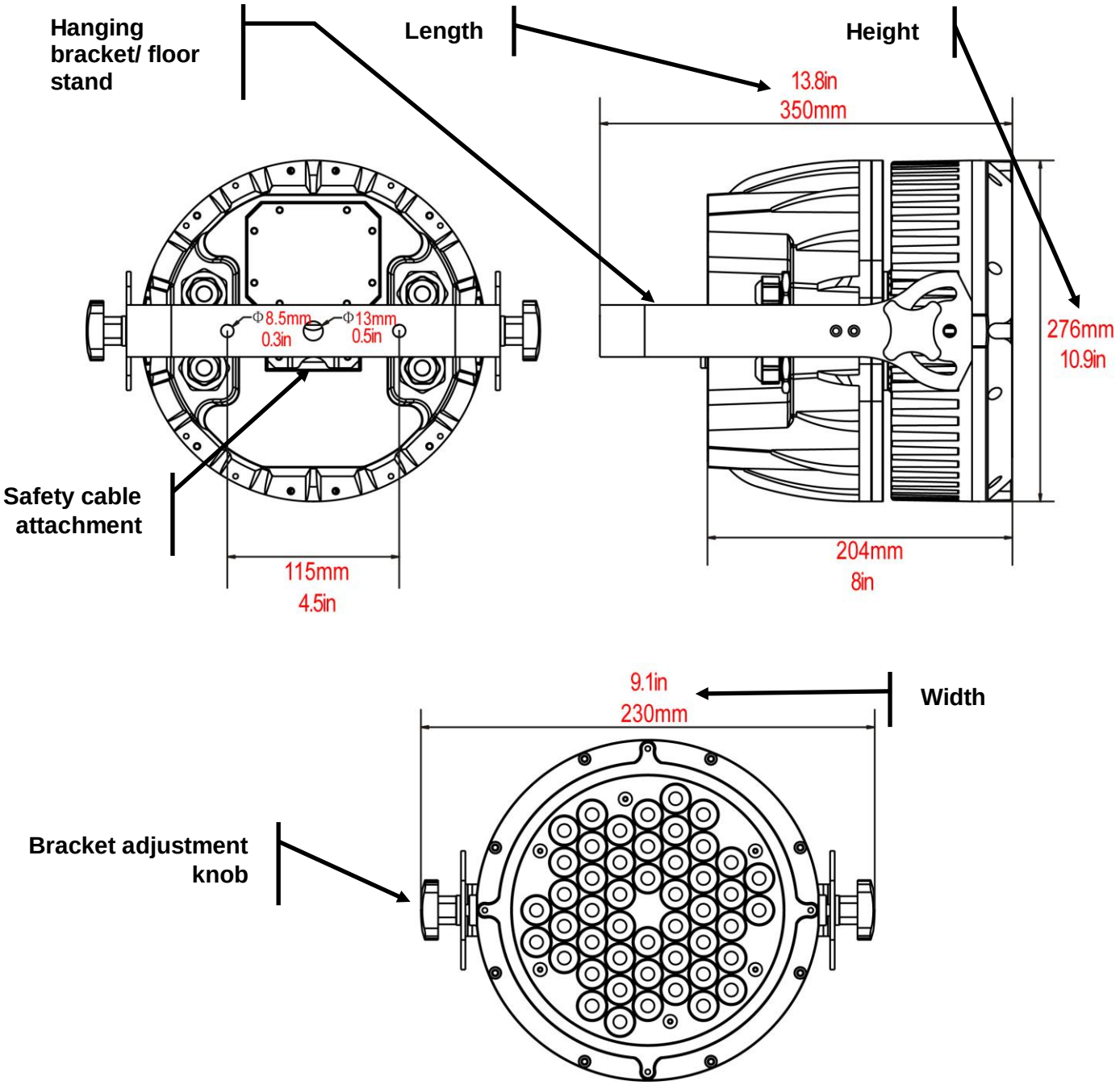
[AR2.S]	CHANNEL	DESCRIPTION
	1	Dimmer
	2	Red
	3	Green
	4	Blue
	5	White
	6	Strobe

[HSV]	CHANNEL	DESCRIPTION
	1	Hue
	2	Saturation
	3	Value (Intensity)

Product Overview



Dimensions


Hanging bracket/ floor stand
Length
Height
13.8in
350mm
Φ8.5mm
0.3in
Φ13mm
0.5in
276mm
10.9in
Safety cable attachment
115mm
4.5in
204mm
8in
9.1in
230mm
Width
Bracket adjustment knob

3. SETUP
AC Power

This fixture has an auto-switching switch-mode power supply that can accommodate a wide range of input voltages. The only thing necessary to do before powering on the unit is to make sure the line voltage you are applying is within the range of accepted voltages. This fixture will accommodate between 100V and 240V AC 50/60 Hz. All fixtures must be powered directly off a switched circuit and cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch.

This fixture is designed for power linking from one fixture to another fixture. Each fixture ships with IP66 proprietary power input cables. Each fixture ships with a power adapter to male Edison connector.

Warning! ***All fixtures must be connected to circuits with a suitable Earth Ground.***

Depending on the application, the lighting fixture may require a different connector. Please refer to the below wire color code if installing a new connector.

Wire	Connection
Brown	AC Live
Blue	AC Neutral
Green/Yellow	AC Ground

Connection	Pin
AC Live	1
AC Neutral	2
Ground(Earth)	3

Mounting

Orientation

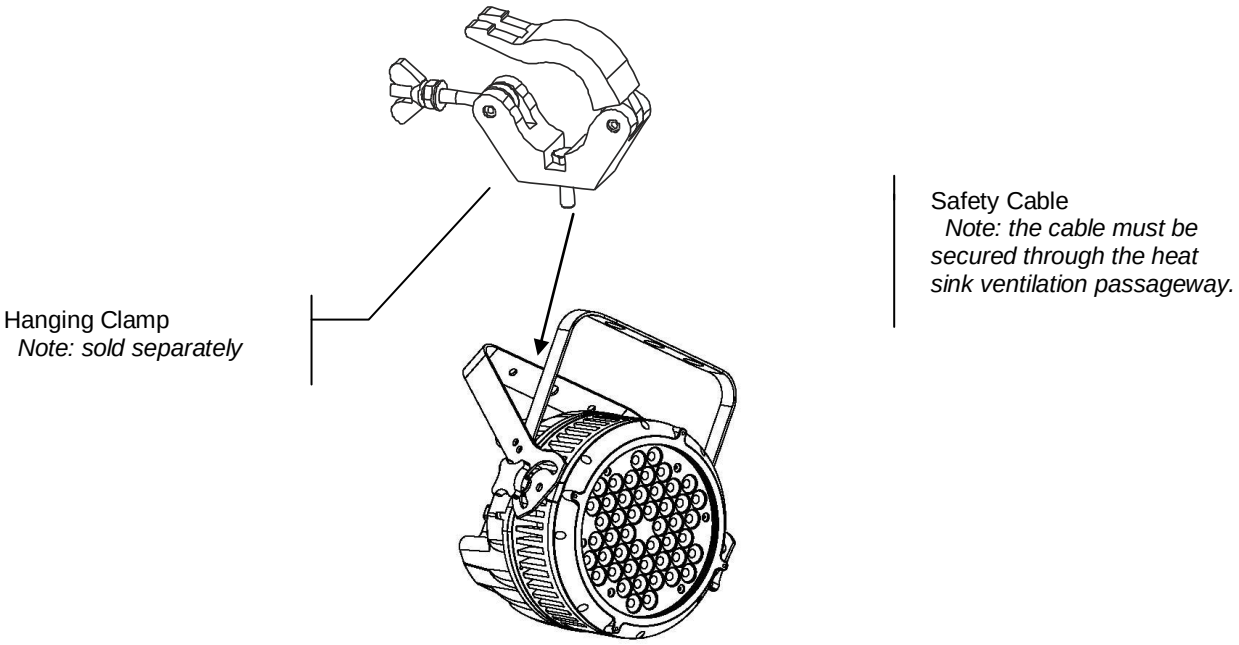
This fixture may be mounted in any safe position.

Rigging

The fixture includes a mounting yoke to which a rigging clamp can be attached. You must supply your own clamp and make sure the clamp is capable of supporting the weight of this fixture. It is recommended to use at least 2 mounting points per fixture.

Note: There are 2 types of applications for this fixture: floor stand for up lighting, and overhead use for down lighting. If you are using this fixture for up lighting, then you must use at least 1 safety cable/chain for each fixture in addition to the mounting brackets.

1. If hanging the fixture for over head use, then please follow the below steps.
2. Block access below the work area and use suitable and stable platform when installing or servicing fixture.
3. Safety cables must always be used, secured through safety cable attachment. The safety cable must be capable of holding 10 times the weight of the fixture.
4. Verify the structure can hold 10 times the weight of all to-be installed fixtures.



Fixture Linking

You will need a serial data link to run light shows of one or more fixtures using a DMX-512 controller or to run synchronized shows on two or more fixtures set to a master/slave operating mode. The combined number of channels required by all the fixtures on a serial data link determines the number of fixtures the data link can support.

Important: Fixtures on a serial data link must be daisy chained in one single line. To comply with the EIA-485 standard no more than 32 devices should be connected on one data link. Connecting more than 32 fixtures on one serial data link without the use of a DMX optically-isolated splitter may result in deterioration of the digital DMX signal.

Maximum recommended serial data link distance: 500 meters (1640 ft.)
Maximum recommended number of fixtures on a serial data link: 32 fixtures

Data Cabling

To link fixtures together you must obtain data cables. If you choose to create your own cable please use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

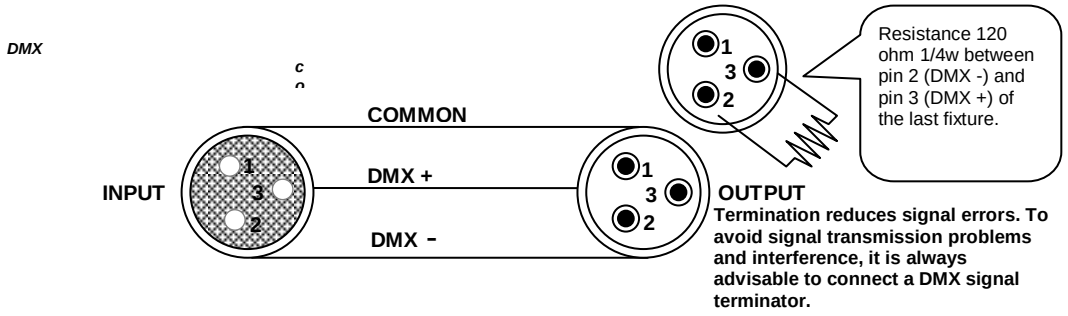
DMX DATA CABLE

Use a Belden© 9841 or equivalent cable which meets the specifications for EIA RS-485 applications. Standard microphone cables cannot transmit DMX data reliably over long distances. The cable will have the following characteristics:

2-conductor twisted pair plus a shield
Maximum capacitance between conductors – 30 pF/ft.
Maximum capacitance between conductor and shield – 55 pF/ft.
Maximum resistance of 20 ohms / 1000 ft.
Nominal impedance 100 – 140 ohms

CABLE CONNECTORS

Cabling must have a male XLR connector on one end and a female XLR connector on the other end.



Termination reduces signal errors. To avoid signal transmission problems and interference, it is always advisable to connect a DMX signal terminator.

CAUTION Do not allow contact between the common and the fixture's chassis ground. Grounding the common can cause a ground loop, and your fixture may perform erratically. Test cables with an ohm meter to verify correct polarity and to make sure the pins are not grounded or shorted to the shield or each other.

3-PIN TO 5-PIN CONVERSION CHART

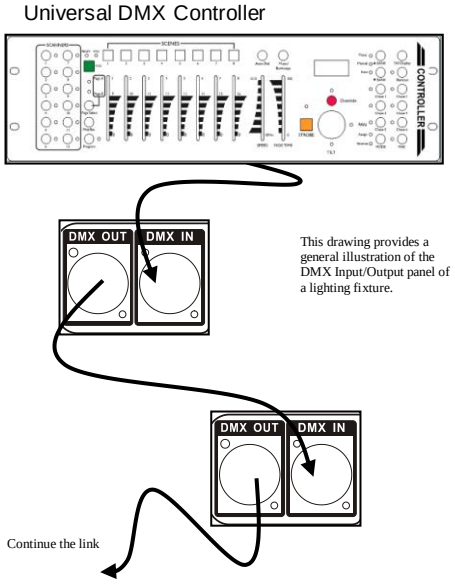
Note! If you use a controller with a 5 pin DMX output connector, you will need to use a 5 pin to 3 pin adapter. The chart below details a proper cable conversion:

3 PIN TO 5 PIN CONVERSION CHART

Conductor	3 Pin Female (output)	5 Pin Male (Input)
Ground/Shield	Pin 1	Pin 1
Data (-) signal	Pin 2	Pin 2
Data (+) signal	Pin 3	Pin 3
Do not use		Pin 4
Do not use		Pin 5

Setting up a DMX Serial Data Link

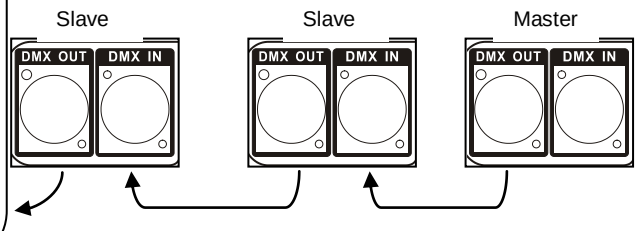
1. Connect the (male) 3 pin connector side of the DMX cable to the output (female) 3 pin connector of the controller.
2. Connect the end of the cable coming from the controller which will have a (female) 3 pin connector to the input connector of the next fixture consisting of a (male) 3 pin connector.
3. Then, proceed to connect from the output as stated above to the input of the following fixture and so on.



Master/Slave Fixture Linking

1. Connect the (male) 3 pin connector side of the DMX cable to the output (female) 3 pin connector of the first fixture.
2. Connect the end of the cable coming from the first fixture which will have a (female) 3 pin connector to the input connector of the next fixture consisting of a (male) 3 pin connector. Then, proceed to connect from the output as stated above to the input of the following fixture and so on.

Often, the setup for Master-Slave and Standalone operation requires that the first fixture in the chain be initialized for this purpose via settings in the control panel. Secondarily, the fixtures that follow may also require a slave setting. Please consult the "Operating Instructions" section in this manual for complete instructions for this type of setup and configuration.



4. OPERATING INSTRUCTIONS
Control Options

The Ilumipod 48 IP Optic RGBW is addressable in the DMX range of 001 to 512. In its simplest control form, this allows for the control of up to 46 fixtures in the 11-channel “STAG” personality; however, a secondary ID address system exists for use in a limited DMX universe and architectural environments. The ID address system allows the user to assign up to 66 fixtures within the same DMX address; in effect, multiplying the control of units within a single universe to 3,036 fixtures. The fixture’s ID address system is accessed using DMX channel 11 [STAG]. Consideration must be placed when programming live performances or cues that need to trigger on demand or on a time line. So, to remain within one second execution time, program no greater than 10 fixtures on ID addressing per DMX channel.

DMX-512 control without ID address

The Ilumipod 48 IP Optic RGBW operates on 11 channels of DMX (“STAG” personality). Address each fixture in increments of 9 channels. (I.e. 1,12,23,34, etc…) To save time you can use the same DMX address for each fixture. All fixtures will then respond simultaneously to control. You may also group your fixtures and address those groups alike for faster programming and control.

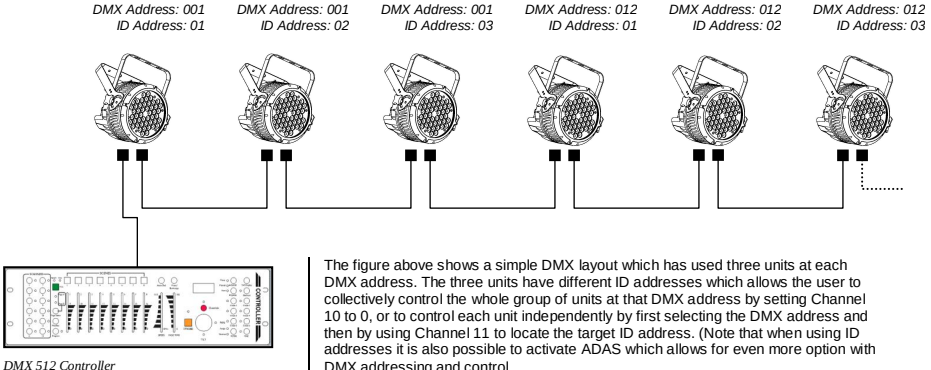
1. Access the control panel function by pressing the (**MENU**) button until the {**RUN MODE**} is displayed.
2. Press (**SET**) and use the (**UP/DOWN**) buttons to select **{DMX}** function.
3. Then, Press (**MENU**) button until {**DMX512 ADDRESS**} is displayed.
4. Pres the (**SET**) button.
6. Use the (**UP/DOWN**) buttons to increase or decrease channels between 001 and 512.
7. Press the (**SET**) button to confirm action. Then press (**MENU**) to exit.

Deactivate ID addressing in each fixture by setting panel function {**ID ON/OFF**} to OFF.
{**MENU**} ➲ {**SETTINGS**} ➲ {**ID ON/OFF**} ➲ **[OFF]**

Notes: If ID addressing is not deactivated in the fixture’s control panel function, unintended results may occur if values are present in channel 11. Make sure values on channel 11 are set to “0”.

DMX-512 addressing with ID address

1. Follow instructions 1 ~ 4 for DMX512 addressing.
2. Activate ID addressing in each fixture by setting panel function {**ID ON/OFF**} to ON.
   {**MENU**} ➲ {**Settings**) ➲ {**ID ON/OFF**} ➲ **[ON]**
3. For every DMX512 starting address the user can set 66 separate ID addresses.
4. Set ID addresses in each fixture by setting panel function {**ID address**} to incremental values. (I.e. 1,2,3,4,5,6,etc…)
   {**MENU**} ➲ {**Settings**} ➲ {**ID address**} ➲ **[01 ~ 66]**
5. ID addresses are accessible using Channel 11 [STAG].



DMX 512 Controller

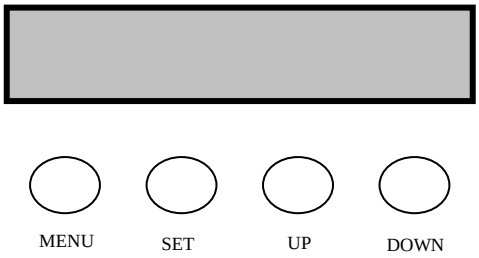
The figure above shows a simple DMX layout which has used three units at each DMX address. The three units have different ID addresses which allows the user to collectively control the whole group of units at that DMX address by setting Channel 10 to 0, or to control each unit independently by first selecting the DMX address and then by using Channel 11 to locate the target ID address. (Note that when using ID addresses it is also possible to activate ADAS which allows for even more option with DMX addressing and control.

Setting the DMX address

Each fixture requires a "start address" from 1 to 512. A fixture requiring one or more channels for control begins to read the data on the channel indicated by the start address. For example, a fixture that occupies or uses 7 channels of DMX and was addressed to start on DMX channel 100, would read data from channels: 100, 101, 102, 103, 104, 105 and 106. Choose start addresses so that the channels used do not overlap and note the start address selected for future reference. The Ilumipod 48 IP Optic RGBW uses up to11 channels of DMX. If this is your first time using DMX, we recommend reading the DMX Primer in the Appendix Section.

Control Panel Functions

All fixture functions and settings are accessible via the built-in control panel interface.



BUTTON	FUNCTION
MENU	Exits from the current menu or function
SET	Enables the currently displayed menu or sets the currently selected value in to the selected function
UP	Navigates upwards through the menu list and increases the numeric value when in a function
DOWN	Navigates downwards through the menu list and decreases the numeric value when in a function

Menu Map

MAIN FUNCTION	SUB-FUNCTION	SELECTION	INSTRUCTION
1. Static Color	Dimmer	000 ~ 255* (0 ~ 100%) *Strobe range is 0~20	User can combine Red, Green and Blue to generate a custom color Select strobing frequency between 0 and 20Hz
	Red		
	Green		
	Blue		
	Color Macros		
	Strobe		
2. Auto	Auto	(1~10)	Choose from 10 automatic programs
	Personal	(1~10)	Choose from 10 programs that be customized under the “edit custom” menu option
3. DMX Address		001 ~ 512	Sets the DMX starting address
4. Run Mode		DMX~Slave	Sets the operating mode for the fixture: to receive signal from a DMX controller (DMX) or to receive signal from the DMX out of another Ilumipod ™ 48 IP Optic RGBW (Slave)
5. Personality		HSV	3-channel: hue, saturation, value
		STAG	11-channel RGBW+D
		Arc.1	3-channel RGB
		Ar1.d	4-channel RGB+D
		Arc 2	4-channel RGBW
		Ar2.d	5-channel RGBW+D
		Ar2.s	6-channel RGBW+D+strobe
6. ID Address		0-66	Assigns the ID address to a fixture
7. Settings	ID	On~Off	Enables or disables ID ADAS
	Upload	**Password required*	Performs an upload of the custom programs to another fixture. Displays *“End!”* when successful
	Dimmer	Off	Select linear dimmer by [off] or special dimmer speed [dim1~4] [dim1] is the fastest dimming curve, and [dim4] is the slowest dimming curve
		dim 1	
		dim 2	
		dim 3	
		dim 4	
	Power	Normal~High	Enables HyperColor™ mode
	RGB to White	Yes~No	Enables or disables RGB to White
	RESET Parameter	**Password required*	Performs a factory reset
8. Key-Lock		On~Off	Enables or Disables password lockout
9. Edit Custom	Custom (1~10) *-(Scene 01-30)*	Red	(0~255)
		Green	
		Blue	
		White	
		Strobe	(0~20)
		Time	(0~255)
		Fade	(0~255)
10. Calib.	White (1~11)	Red	Sets Custom White Balance by adjusting the maximum fader value (0~255)
		Green	
		Blue	
		White	
	RGB to White	On ~ Off	This setting presets and switches RGB to full power (Off) or RGB auto-mix to white (On)

DMX512 Channel Values

The Ilumipod 48 IP Optic RGBW has 7 DMX512 channel configurations [**HSV**, **STAG**, **ARC1**, **ARC1+D**, **ARC2**, **ARC2+D,** and **Ar2.s**].

STAG

CHANNEL	VALUE	FUNCTION
1		**Dimmer**
	000 ⇔ 255	0 ⇔ 100%
2		**Red** **(or STEP TIME when CUS.01-10 is activated)**
	000 ⇔ 255	0 ⇔ 100%
3		**Green** **(or FADE TIME when CUS.01-10 is activated)**
	000 ⇔ 255	0 ⇔ 100%
4		**Blue**
	000 ⇔ 255	0 ⇔ 100%
5		**White**
	000 ⇔ 255	0 ⇔ 100%
6		**Color Macro + White Balance + HyperColor™**
	000 ⇔ 005	No Function
	006 ⇔ 020	HyperColor™ Mode (only in Normal power mode)
	021 ⇔ 030	No Function
	031 ⇔ 050	Red 100%/ Green Up/ Blue 0%
	051 ⇔ 070	Red Down/ Green 100%/ Blue 0%
	071 ⇔ 090	Red 0%/ Green 100%/ Blue Up
	081 ⇔ 095	Red 100%/ Green 0%/ Blue Down
	091 ⇔ 110	Red 0%/ Green Down/Blue 100%
	111 ⇔ 130	Red Up/ Green 0%/Blue 100%
	131 ⇔ 150	Red 100%/ Green 0%/ Blue Down
	151 ⇔ 170	Red 100%/ Green Up/ Blue Up
	171 ⇔ 190	Red Down/ Green Down/ Blue 100%
	191 ⇔ 200	RGBW 100%
	201 ⇔ 205	White 1:3200K
	206 ⇔ 210	White 2: 3400K
	211 ⇔ 215	White 3: 4200K
	216 ⇔ 220	White 4: 4900K
	221 ⇔ 225	White 5: 5600K
	226 ⇔ 230	White 6: 5900K
	231 ⇔ 235	White 7: 6500K
	236 ⇔ 240	White 8: 7200K
	241 ⇔ 245	White 9: 8000K
	246 ⇔ 250	White 10: 8500K
	251 ⇔ 255	White 11: 10000K
7		**Strobe**
	000 ⇔ 004	No Function
	005 ⇔ 255	0 ⇔ 20Hz

8		**Auto + Custom Programs**
	000 ⇔ 009	No Function
	010 ⇔ 019	Auto 1
	020 ⇔ 029	Auto 2
	030 ⇔ 039	Auto 3
	040 ⇔ 049	Auto 4
	050 ⇔ 059	Auto 5
	060 ⇔ 069	Auto 6
	070 ⇔ 079	Auto 7
	080 ⇔ 089	Auto 8
	090 ⇔ 099	Auto 9
	100 ⇔ 109	Auto 10
	110 ⇔ 119	Custom 1
	120 ⇔ 129	Custom 2
	130 ⇔ 139	Custom 3
	140 ⇔ 149	Custom 4
	150 ⇔ 159	Custom 5
	160 ⇔ 169	Custom 6
	170 ⇔ 179	Custom 7
	180 ⇔ 189	Custom 8
	190 ⇔ 199	Custom 9
	200 ⇔ 255	Custom 10
9		**Auto Speed Adjustment** (only when using ch.8)
	000 ⇔ 255	0 ⇔ 100%
10		**Dimmer Speed**
	000 ⇔ 009	Linear dimming curve
	010 ⇔ 069	Nonlinear dimming curve 1 (fastest)
	070 ⇔ 129	Nonlinear dimming curve 2
	130 ⇔ 189	Nonlinear dimming curve 3
	190 ⇔ 255	Nonlinear dimming curve 4 (slowest)

CHANNEL 11 (ID ADDRESS SELECTION)

	000 ⇔ 009	All IDs	212	ID 23	235	ID 46
	010 ⇔ 019	ID 1	213	ID 24	236	ID 47
	020 ⇔ 029	ID 2	214	ID 25	237	ID 48
	030 ⇔ 039	ID 3	215	ID 26	238	ID 49
	040 ⇔ 049	ID 4	216	ID 27	239	ID 50
	050 ⇔ 059	ID 5	217	ID 28	240	ID 51
	060 ⇔ 069	ID 6	218	ID 29	241	ID 52
	070 ⇔ 079	ID 7	219	ID 30	242	ID 53
	080 ⇔ 089	ID 8	220	ID 31	243	ID 54
	090 ⇔ 099	ID 9	221	ID 32	244	ID 55
	100 ⇔ 109	ID 10	222	ID 33	245	ID 56
	110 ⇔ 119	ID 11	223	ID 34	246	ID 57
	120 ⇔ 129	ID 12	224	ID 35	247	ID 58
	130 ⇔ 139	ID 13	225	ID 36	248	ID 59
	140 ⇔ 149	ID 14	226	ID 37	249	ID 60
	150 ⇔ 159	ID 15	227	ID 38	250	ID 61
	160 ⇔ 169	ID 16	228	ID 39	251	ID 62
	170 ⇔ 179	ID 17	229	ID 40	252	ID 63
	180 ⇔ 189	ID 18	230	ID 41	253	ID 64
	190 ⇔ 199	ID 19	231	ID 42	254	ID 65
	200 ⇔ 209	ID 20	232	ID 43	255	ID 66
	210	ID 21	233	ID 44		
	211	ID 22	234	ID 45		

Important Notes about STAG DMX Operation

MASTER DIMMER

- Channels 1 controls the intensity of the currently projected color
- When the slider is at the highest position (255), then the intensity of the output is at the maximum.

RED, GREEN BLUE AND WHITE COLOR SELECTION

- Channels 2, 3 4 and 5 control the intensity ratio of each of the Red, Green, Blue,& White LEDs.
- Channels 1, 2 3 and 4 can be combined together to create over 4.2 billion color combinations.

STROBE

- Channel 7 controls the strobe of Channels 1 through 5.
- Channel 7 has priority over Channels 2, 3, 4 & 5.
- Speed of the strobe is adjustable from 0 to 20 Hz.

COLOR MACROS

- Channel 6 selects the required Color Macro.
- Channel 6 has priority over Channels 2, 3, 4, 5 & 7.
- Channel 1 is used to control the intensity of the current Color Macro.

ID ADDRESS SELECTION

- Use channel 11 to select ID addressed fixtures.
- Each independent DMX address can have up to 66 ID addressed fixtures.
- ID address “0” allows control of all fixtures simultaneously.

AUTO & CUSTOM PROGRAMS

- Chanel 8 selects the preset Auto/Custom programs 1~10
- When activating the Auto/Custom programs, it is then possible to control the Step time and Fade time by using Channels 2 & 3 respectively.
- Channel 8 has priority over channels 2-7.

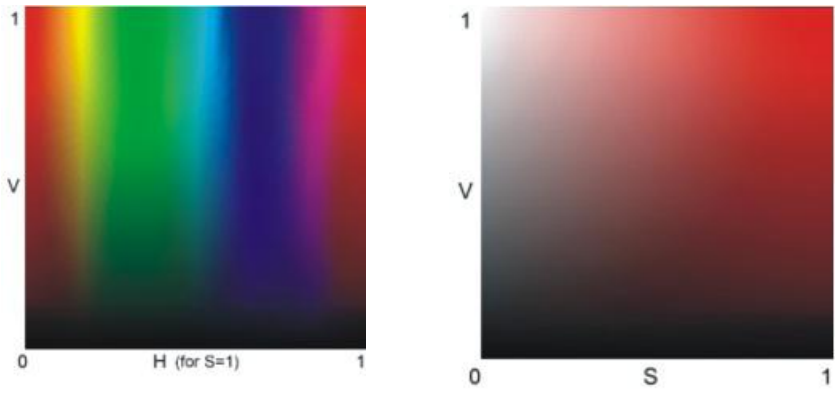
DIMMER SPEED

- Channel 10 is for selecting the dimmer mode and dimmer speed.
- When channel 10 is not activated, then RGBW and Master Dimmer are linear.
- The dimmer modes 1, 2, 3, and 4 are different speeds of the nonlinear dimming curves.

HSV

CHANNEL	VALUE	FUNCTION
1	000 ⇔ 255	**Hue** 0 ⇔ 100%
2	000 ⇔ 255	**Saturation** 0 ⇔ 100%
3	000 ⇔ 255	**Value** 0 ⇔ 100%

Note: In HSV mode, Hue stands for the visible light, such as red, yellow, and cyan, etc. Saturation refers to the dominance of hue in the color; when saturation is at 100%, then the color is at its purest. Value is the color's brightness; when value is at 100%, then the color is at its brightest.



Ar2.s

CHANNEL	VALUE	FUNCTION
1	000 ⇔ 255	**Dimmer** 0 ⇔ 100%
2	000 ⇔ 255	**Red** 0 ⇔ 100%
3	000 ⇔ 255	**Green** 0 ⇔ 100%
4	000 ⇔ 255	**Blue** 0 ⇔ 100%
5	000 ⇔ 255	**White** 0 ⇔ 100%
6	000 ⇔ 255	**Strobe** 0 ⇔ 20Hz

Arc.1

CHANNEL	VALUE	FUNCTION
1	000 ⇔ 255	**Red** 0 ⇔ 100%
2	000 ⇔ 255	**Green** 0 ⇔ 100%
3	000 ⇔ 255	**Blue** 0 ⇔ 100%

Ar1.d

CHANNEL	VALUE	FUNCTION
1	000 ⇔ 255	**Dimmer** 0 ⇔ 100%
2	000 ⇔ 255	**Red** 0 ⇔ 100%
3	000 ⇔ 255	**Green** 0 ⇔ 100%
4	000 ⇔ 255	**Blue** 0 ⇔ 100%

Arc.2

CHANNEL	VALUE	FUNCTION
1	000 ⇔ 255	**Red** 0 ⇔ 100%
2	000 ⇔ 255	**Green** 0 ⇔ 100%
3	000 ⇔ 255	**Blue** 0 ⇔ 100%
4	000 ⇔ 255	**White** 0 ⇔ 100%

Ar2.d

CHANNEL	VALUE	FUNCTION
1	000 ⇔ 255	**Dimmer** 0 ⇔ 100%
2	000 ⇔ 255	**Red** 0 ⇔ 100%
3	000 ⇔ 255	**Green** 0 ⇔ 100%
4	000 ⇔ 255	**Blue** 0 ⇔ 100%
5	000 ⇔ 255	**White** 0 ⇔ 100%

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5. APPENDIX

DMX Primer

There are 512 channels in a DMX-512 connection. Channels may be assigned in any manner. A fixture capable of receiving DMX 512 will require one or a number of sequential channels. The user must assign a starting address on the fixture that indicates the first channel reserved in the controller. There are many different types of DMX controllable fixtures and they all may vary in the total number of channels required. Choosing a start address should be planned in advance. Channels should never overlap. If they do, this will result in erratic operation of the fixtures whose starting address is set incorrectly. You can however, control multiple fixtures of the same type using the same starting address as long as the intended result is that of unison movement or operation. In other words, the fixtures will be slaved together and all respond exactly the same.

DMX fixtures are designed to receive data through a serial Daisy Chain. A Daisy Chain connection is where the DATA OUT of one fixture connects to the DATA IN of the next fixture. The order in which the fixtures are connected is not important and has no effect on how a controller communicates to each fixture. Use an order that provides for the easiest and most direct cabling. Connect fixtures using shielded two conductor twisted pair cable with three pin XLR male to female connectors. The shield connection is pin 1, while pin 2 is Data Negative (S-) and pin 3 is Data positive (S+).

General Maintenance

To maintain optimum performance and minimize wear fixtures should be cleaned frequently. Usage and environment are contributing factors in determining frequency. As a general rule, fixtures should be cleaned at least twice a month. Dust build up reduces light output performance and can cause overheating. This can lead to reduced LED life and increased mechanical wear. Be sure to power off fixture before conducting maintenance.

Unplug fixture from power. Use a vacuum or air compressor and a soft brush to remove dust collected on external vents and internal components; be sure to prevent the fans from turning during this process, as it can cause damage to the fans. Clean all glass when the fixture is cold with a mild solution of glass cleaner or Isopropyl Alcohol and a soft lint free cotton cloth or lens tissue. Apply solution to the cloth or tissue and drag dirt and grime to the outside of the lens. Gently polish optical surfaces until they are free of haze and lint.

The cleaning of external optical lenses must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the unit's optics. Clean with soft cloth using normal glass cleaning fluid. Always dry the parts carefully. Clean the external optics at least every 20 days.

Returns Procedure

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Merchandise Authorization Number (RMA #). Products returned without an RMA # will be refused. Call ILUMINARC™ and request an RMA # prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. ILUMINARC™ reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

Note: If you are given an RMA #, please include the following information on a piece of paper inside the box:

1) Your name
2) Your address
3) Your phone number
4) The RMA #
5) A brief description of the symptoms

Claims

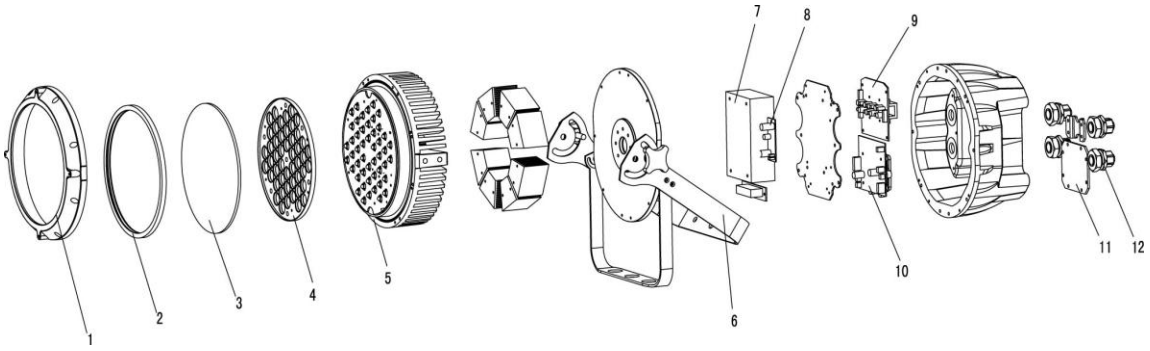
Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise. It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Any other claim for items such as missing component/part, damage not related to shipping, and concealed damage, must be made within seven (7) days of receiving merchandise.

Ilumipod 48 IP Service Maintenance Guide

Symptom(s)	Possible Solution(s)
1 or more LED's are not illuminating	Clean the fixture regularly to avoid any such failure. This fixture is convection cooled, which means that if the surface is kept clean and free of debris, then proper cooling will be allowed to occur
	An LED may have failed, resulting in an open circuit. In this event, all of the red, green, blue, or white in a single module will no longer illuminate. This does not mean that all of the LEDs have failed, but the circuit is wired in series.
	An LED may have failed, resulting in a short circuit. In this event, only the single LED which has failed will no longer function. This does not mean that all of the LEDs have failed, but the circuit is wired in series.
	-Note: In the event of LED failure, a replacement LED PCB assembly may be purchased directly from ILUMINARC™ Part#: P222-C2LEDP
1 or more LED's are producing very low output	Check that the lens assembly is installed properly. If the lens assembly is not aligned properly over the LEDs, then they will not project fully *-See section on Lens Assembly Installation*
	-Note: In the event of LED failure, a replacement LED PCB assembly may be purchased directly from ILUMINARC™ Part#: P222-C2LEDP
Breaker/Fuse keeps blowing	Check total load placed on the electrical circuit
	Check for a short in the electrical wiring: internal and/or external
Device has no power	Check device's fuse (internal)
	Check for power on Mains
	Check cable connections The Ilumipod 48 IP IP-66 cables must be firmly connected and locked in place for operation
	-Note: In the event of autoswitching transformer failure, the unit can be sent in for repair; however, a replacement part can be ordered directly from ILUMINARC™ Part#: P140-C2ELTR
Fixture is not responding to DMX	Check Control Panel settings for correct addressing
	Check DMX cables
	Check polarity switch settings on the controller
	Check cable connections
	Call service technician
	-Note: In the event of Display PCB failure, a replacement PCB can be ordered directly from ILUMINARC™ Part#: P170-C2DISP
Loss of signal	Use only DMX cables
	Install terminator
	Note: Keep DMX cables separated from power cables or black lights
Stand alone operation	This fixture has built-in, automatic programs that may be triggered from the onboard Control Board
The display is only showing: ####	The password lockout has been enabled. You may enter the user-set password, or you may use the factory default password: "[UP]-[DOWN]-[UP]-[DOWN]

If you still have a problem after trying the above solutions, please contact ILUMINARC™ Technical Support.

Blow-out Diagram.



	Description	Part Number
1	Front cover	P111-C2FRNT
2	Glass watertight seal	P111-C2SEAL
3	Glass cover	P111-C2GLAS
4	Lens Assembly	*Fixture model specific*
5	LED Metal-Core PCB assembly	P222-C2LEDP
6	Hanging bracket/Floor stand	P111-C2BRKT
7	Electronic transformer	P140-C2ELTR
8	5V voltage regulator PCB	P170-5VREGP
9	Display PCB	P170-C2DISP
10	LED Driver PCB (master)	P172-C2DRVR
11	Control Board cover	P111-C2CVR
12	Cable strain relief/watertight seal-DMX	P111-C2CSSIG
12	Cable strain relief/watertight seal-power	P111-C2CSPWR
13	Display/Master IC chip	P170-C2MIC (not shown)

LED Life: ILUMINARC™ rates LED lifetime based on lumen depreciation of 70% of the original output, with data provided by the manufacturer of the LED. Data from the manufacturer of the LED are not independently verified or measured by ILUMINARC™. When the fixture is operating in optimal environmental conditions, the LED lifetime is rated to be 50,000 to 70,000 hours by the LED manufacturer.

LED Binning: LED manufacturers sort LEDs into “bins”, based on variances in color, output intensity and the frequency at which the semiconductor operates. ILUMINARC™ strives to hold its LED manufacturers to the highest standards of binning to optimize consistency in output from fixture to fixture. However, the availability of a single bin cannot be guaranteed. With that in mind, ILUMINARC™ has developed a rigorous control system to seek the best achievable consistency in color and output.

Color Rendering Index (CRI): CRI is an industry standard method to compare properties of different types of light sources. There are known limitations and inconsistencies related to CRI. Results may vary depending on the environmental factors involved. For this reason, the US Department of Energy (DOE) states that CRI should be considered as one point of reference among others in evaluating white LED products and systems.

The following is an excerpt of recommendations from the DOE:

1. Identify the visual tasks to be performed under the light source. If color fidelity under different light sources is critically important (for example in a space where color or fabric comparisons are made under both daylight and electric lighting), CRI values may be a useful metric for rating LED products.

2. CRI may be compared only for light sources of equal CCT. This applies to all light sources, not only to LEDs. Also, differences in CRI values of less than five points are not significant, e.g., light sources with 80 and 84 CRI are essentially the same.

3. If color appearance is more important than color fidelity, do not exclude white light LEDs solely on the basis of relatively low CRI values. Some LED products with CRIs as low as 25 still produce visually pleasing white light.

4. Evaluate LED systems in person and, if possible, on-site when color fidelity or color appearance are important issues.

Source: DOE publication: PNNL-SA-56891, January 2008

Technical Specifications

WEIGHT & DIMENSIONS

Length	12 in (305 mm)
Width	9 in (230 mm)
Height	10.9 in (276 mm)
Weight	20 lbs (9.1 kg)

POWER

Autoswitching	100V-40VAC 60/50Hz
Power Consumption	179.4W (1.5A) max @ 120V
Power Consumption	178.9W (0.8A) max @ 230V
Inrush Power	(1.2A) @ 120V
Inrush Power	(0.8A) @ 230V
Power Factor	1.00 @ 120V
Power Factor	0.99 @ 230V
Power Output	7 units max @ 120V, 15 units max @ 230V

LIGHT SOURCE

LED	48 (12 750mA Red, 12 1,000mA Green, 12 1,000mA Blue, 12 1,000mA White) 50,000 hrs

THERMAL

Maximum ambient temperature	104°F (40°C)

CONTROL & PROGRAMMING

Data input	locking 3-pin XLR male socket
Data output	locking 3-pin XLR female socket
Data pin configuration	pin 1 shield, pin 2 (-), pin 3 (+)
Protocols	DMX-512 USITT
DMX Channels	3,4,5,6,11

ORDERING INFORMATION

Ilumipod 48 Optic 15 RGBW (white housing)	11048003
Ilumipod 48 Optic 30 RGBW (white housing)	11048001
Ilumipod 48 Optic 15 RGBW (gray housing)	11048004
Ilumipod 48 Optic 30 RGBW (gray housing)	11048002

WARRANTY INFORMATION

Warranty	2-year limited warranty